CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-87

WASTE DISCHARGE REQUIREMENTS
(SITE CLEANUP REQUIREMENTS) FOR:

VAN WATERS AND ROGERS
JUNCTION AVENUE FACILITY
CITY OF SAN JOSE
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Van Waters & Rogers, a division of Univar, hereinafter called the discharger, operates a chemical blending, storage, and distribution facility on a site of approximately 11.8 acres on the City of San Jose, Santa Clara County located at 2256 Junction Avenue, which is about 1.7 miles northeast of the intersections of Routes 17 and 101.

2. The facility contains a total of 36 underground tanks, of 5,000 and 10,000 gallon capacity, used presently or in the past to store the following industrial chemicals: trichloroethane, methylene chloride, tetrachloroethylene, xylene, toluene, aliphatic hydrocarbons, aromatic hydrocarbons, ketones, glycols, and alcohols.

3. The discharger also collects and transports spent chemicals in drums and empty drums prior to treatment or disposal. Waste chemicals, such as acid and alkaline container rinsings, are treated and discharged to the publicly owned waste treatment plant. Chlorinated and fluorinated solvents, which are distilled and recycled, are stored in above ground tanks.

4. Subsurface investigation was initiated at the site in December 1982. This investigation detected the presence of high levels of various industrial solvents, including trichloroethane, tetrachloroethylene, dichloroethane, dichloroethylene, methylene chloride, vinyl chloride, toluene, xylene, ketones, and alcohols, in both soils and groundwater in the vicinity of the tank farm. A number of

the above chemicals, which are EPA priority pollutants such as trichloroethylene, trichloroethane, and methylene chloride, have been detected in groundwater samples at concentrations exceeding 100,000 parts per billion. The source of the organic chemical pollution appears to be a result of spillage, inadequate chemical handling practices, and/or leakage from tanks and piping.

5. The discharger has completed additional investigation to further delineate the extent of the solvent pollution in the soils and groundwater. As of January 1985, the solvent contamination extended vertically to a dense sand and gravel aquifer to a depth of about 80 feet, and horizontally a distance of approximately 150 feet downgradient from the tank farm source area to the property boundary. Based upon the results of water sample analyses from recently installed shallow wells off site, the contaminant plume is not believed to extend further than approximately 200 feet beyond the property boundary; however, additional investigation will be necessary to conclusively verify this.

6. The soil and groundwater pollution at the facility is of particular concern because of the site hydrogeology and area water use. Specific factors contributing to this concern are the lack of an effective confining unit until a depth of approximately 100 feet to prevent the further penetration of solvents, the close proximity of domestic wells (within 1/2 mile downgradient) and municipal supply wells (within 1 mile downgradient), and the large number, and high concentrations of toxic compounds. Well depth information for active agricultural and domestic wells located downgradient from the site demonstrate that groundwater is drawn from depths shallower than 150 feet.

7. The discharger has recently agreed to implement the following remedial action plan:

   a. Contain and cleanup the polluted groundwaters by extraction pumping and/or other necessary hydraulic control structures. Polluted groundwaters, extracted as a result of the cleanup, shall receive sufficient treatment to reduce the concentrations of organic pollutants to acceptable levels prior to discharge to surface waters of the State.

b. Complete further definition and continue to monitor the groundwater pollution, and document contaminant concentration changes over time in the subsurface environment.

c. Test the underground solvent storage tanks and piping with a precision test to ensure their integrity, and where necessary, remove from service, renovate, or replace the tanks and piping.

8. The Board finds that the tasks outlined in Finding 7 above are necessary to prevent the continued migration of contaminants to unaffected groundwaters which could result in the loss of existing and potential beneficial uses.

9. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on July 21, 1982. The Basin Plan contains water quality objectives for groundwater.

10. The existing and potential beneficial uses of the groundwater underlying the facility include:

a. Municipal Water Supply
b. Domestic Water Supply
c. Agricultural Water Supply
d. Industrial Service and Process Water Supply

11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. This project constitutes a minor modification to land and such activity is thereby exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Section 15304 of the Resources Agency Guidelines.

13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Van Waters & Rogers, San Jose, in order to meet the provisions contained in Division 7 of the California Water Code and the regulations adotped thereunder, shall comply with the following:

A. Prohibitions

1. The discharge of waste or hazardous materials in a manner which will degrade the water quality or result in the loss of beneficial uses of the groundwaters of the State is prohibited.

2. Further migration of pollutants through surface runoff or subsurface transport to usable groundwaters or surface waters is prohibited.

B. Specifications

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Testing, usage, and renovation or replacement of the solvent storage distribution system shall be in accordance with state laws and the city or county ordinances which regulate the underground storage of hazardous materials.

3. The lateral and vertical extent of soil and groundwater pollution shall be defined at all times. Should monitoring results show evidence of plume migration, additional plume characterization shall be required.

C. Provisions

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program approved by the Executive Officer.

2. In order to comply with Specification B.2 above, the discharger shall accomplish the following:

   Complete the precision testing of all underground storage tanks and piping, and submit to the Regional Board by August 30, 1985, a status report on the testing and the current operation of the solvent storage and distribution system. The report shall contain recommendations and plans with an implementation time schedule, for removal from service, renovation, or replacement of the system as necessary.

3. In order to comply with Prohibitions A.1 and A.2 above, the discharger shall accomplish the following:

   a. Complete installation of extraction wells, or other necessary hydraulic control structures, by August 30, 1985, of adequate design to contain and cleanup the polluted groundwaters within the property boundaries of the facility.

   b. Submit to the Regional Board by October 1, 1985, a technical report summarizing the results of the field work completed to accomplish the tasks described in Provision C.3.a above. This report shall also describe measures taken to evaluate and monitor the adequacy of the system to accomplish the tasks required under Provision C.3.a above.

   c. Submit to the Regional Board by September 1, 1985, a technical report on the design of the proposed treatment system for extracted groundwaters.

   d. Install by October 30, 1985, the treatment system described in Provision C.3.c above.

   e. Commence containment and cleanup of the polluted groundwaters on site by November 15, 1985.

   f. Submit to the Regional Board by January 15, 1986, a technical report which evaluates the on site groundwater extraction/treatment system, or other measures necessary to accomplish the tasks described in Provision 3.a above. The report shall demonstrate the adequacy of the system to contain the pollutant plume and to achieve the efficient removal of pollutants from the subsurface environment. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the wells, establishment of the cones of depression by field measurements, and presentation of monitoring data from adjacent and downgradient monitoring wells. Specific modifications to the system shall be proposed in the event of non-compliance with Provision 3.a above.

4. In order to comply with Specification B.3 above, the discharger shall accomplish the following:

a. Submit to the Regional Board by August 15, 1985, a proposal for further definition and characterization of the pollution plume. Such investigation shall include additional monitoring wells of sufficient number and spacing to detect possible channelization of the plume, or to avoid misinterpretation of subsurface conditions between monitoring wells.

b. Submit to the Regional Board by February 15, 1986, a technical report summarizing the results of the investigation described in Provision 4.a above. This report shall recommend specific measures to contain and cleanup polluted groundwaters off site from the facility as necessary.

5. Documentation of compliance with Specification B.3 and Provisions C.1, C.3.a, C.3.b, C.3.f, C.4.a, and C.4.b, shall include groundwater gradient contour maps, pollution concentration contour maps, and updated cross-sectional geological maps describing the hydrogeologic setting of the site. Appropriately scaled and detailed base maps shall be produced to show the location of all monitoring and extraction wells, and identify adjacent facilities and structures.

6. The discharger shall submit bi-monthly progress reports to the Regional Board demonstrating compliance with the Prohibitions, Specifications, and Provisions of this Order. In the event of non-compliance, the discharger shall clarify the reasons for non-compliance and shall propose specific measures to be taken to achieve compliance with an implementation time schedule.

7. All samples shall be analyzed by State certified laboratories using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.

8. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:

a. Entry upon premises where any pollution source exists, or may potentially exist, or in which any required records are kept;

b. Access at reasonable times to copy any records required to be kept under terms and conditions of this Order;

c. Inspection of any monitoring equipment or methods required by this Order.

d. Sampling of any groundwater or soil which is accessible, or may become accessible as part of any investigation or remedial action program, to the discharger.

9. The discharger shall file a report on any material changes in the nature, quantity, or transport of polluted groundwater associated with the pollution described in this Order.

10. The discharger shall maintain in good working order and operate, as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

11. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on July 17, 1985

ROGER B. JAMES
Executive Officer